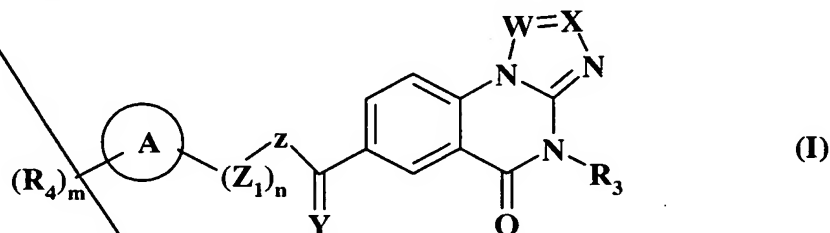


Claims

1 - A compound selected from those of formula (I):

The invention relates to cyclized quinazolines of formula (I)



in which:

W represents N or C-R<sub>1</sub>; in which R<sub>1</sub> is selected from:

- hydrogen atom,
- OR<sub>5</sub>, SR<sub>5</sub> in which R<sub>5</sub> is selected from hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl and aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl,
- (C<sub>1</sub>-C<sub>6</sub>)alkyl, cycloalkyl of 3 to 8 carbon atoms optionally interrupted with one hetero atom selected from oxygen, sulfur and nitrogen, aryl, heteroaryl and aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, these groups being optionally substituted by (CH<sub>2</sub>)<sub>p</sub>-OH or (CH<sub>2</sub>)<sub>p</sub>-NH<sub>2</sub>, in which p is an integer from 0 to 4 inclusive,

X represents N or C-R<sub>2</sub> in which R<sub>2</sub> is selected from:

- hydrogen atom,
- NR<sub>6</sub>R<sub>7</sub>, OR<sub>6</sub>, SR<sub>6</sub> in which R<sub>6</sub> and R<sub>7</sub>, identical or different, are selected from hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl and aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl,
- (C<sub>1</sub>-C<sub>6</sub>)alkyl, cycloalkyl of 3 to 8 carbon atoms optionally interrupted with one hetero atom selected from oxygen, sulfur and nitrogen, aryl, heteroaryl and aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, these groups being optionally substituted by (CH<sub>2</sub>)<sub>p</sub>-OH or (CH<sub>2</sub>)<sub>p</sub>-NH<sub>2</sub>, in which p is an integer from 0 to 4 inclusive,

Y represents a group selected from oxygen, sulfur, -NH, and -N(C<sub>1</sub>-C<sub>6</sub>)alkyl,

Z represents a group selected from:

- oxygen, sulphur,
  - and  $-NR_8$  in which  $R_8$  represents a group selected from hydrogen,  $(C_1-C_6)$ alkyl, aryl $(C_1-C_6)$ alkyl, cycloalkyl, aryl, and heteroaryl, and
  - when Y is oxygen, sulphur, or  $-N(C_1-C_6)$ alkyl, Z optionally represents a carbon atom
- 5 which is optionally substituted by a group selected from  $(C_1-C_6)$ alkyl, aryl, aryl $(C_1-C_6)$ alkyl, aromatic heterocycle, non-aromatic heterocycle, and cycloalkyl,

n is an integer from 0 to 8 inclusive,

$Z_1$  represents a group  $-CR_9R_{10}$  wherein  $R_9$  and  $R_{10}$ , identical or different, represent a group selected from hydrogen,  $(C_1-C_6)$ alkyl, halo $(C_1-C_6)$ alkyl, halogen,  $NR_5R_{11}$ ,  $OR_5$ ,  $SR_5$  and  $C(=O)OR_5$  in which  $R_5$  and  $R_{11}$ , identical or different, represents hydrogen atom or  $(C_1-C_6)$ alkyl, and

- when n is greater than or equal to 2, the hydrocarbon chain  $Z_1$  optionally contains one or more multiple bonds,
  - and/or one of the carbon atoms in the hydrocarbon chain  $Z_1$  may be replaced with an
- 15 oxygen atom, a sulphur atom which is optionally substituted by one or two oxygen atoms, or a nitrogen atom which is optionally substituted by  $(C_1-C_6)$ alkyl,

A represents a group selected from :

- aromatic or non-aromatic, 5- or 6-membered monocycle comprising from 0 to 4 heteroatoms selected from nitrogen, oxygen and sulphur, and
  - bicycle, composed of two aromatic or non-aromatic, 5- or 6-membered rings, which
- 20 may be identical or different, comprising from 0 to 4 heteroatoms selected from nitrogen, oxygen and sulphur,

m is an integer from 0 to 7 inclusive,

the group(s)  $R_4$ , which may be identical or different, is (are) selected from  $(C_1-C_6)$ alkyl, halogen,  $-CN$ ,  $-NO_2$ ,  $-SCF_3$ ,  $-CF_3$ ,  $-OCF_3$ ,  $-NR_5R_{11}$ ,  $-OR_5$ ,  $-SR_5$ ,  $-SOR_5$ ,  $-SO_2R_5$ ,  $-(CH_2)_kSO_2NR_5R_{11}$ ,  $-X_1(CH_2)_kC(=O)OR_5$ ,  $-(CH_2)_kC(=O)OR_5$ ,  $-X_1(CH_2)_kC(=O)NR_5R_{11}$ ,  $-(CH_2)_kC(=O)NR_5R_{11}$ , and  $-X_2-R_{12}$  in which:

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•  $X_1$  represents a group selected from oxygen, sulphur optionally substituted by one or two oxygen atoms, and nitrogen substituted by hydrogen or  $(C_1-C_6)$ alkyl,

•  $k$  is an integer from 0 to 3 inclusive,

•  $R_5$  and  $R_{11}$ , which may be identical or different, are selected from hydrogen and  $(C_1-C_6)$ alkyl,

•  $X_2$  represents a group selected from single bond,  $-CH_2-$ , oxygen atom, sulphur atom optionally substituted by one or two oxygen atoms, and nitrogen atom substituted by hydrogen atom or  $(C_1-C_6)$ alkyl group,

•  $R_{12}$  represents an aromatic or non-aromatic, heterocyclic or non-heterocyclic, 5- or 6-membered ring which is optionally substituted by one or more groups, which may be identical or different, selected from  $(C_1-C_6)$ alkyl, halogen, hydroxyl and amino, and when the ring is heterocyclic, it comprises from 1 to 4 heteroatoms selected from nitrogen, oxygen and sulphur,

$R_3$  represents a group selected from:

• hydrogen,

•  $(C_1-C_6)$ alkyl,  $(C_2-C_6)$ alkenyl,  $(C_2-C_6)$ alkynyl, these groups being optionally substituted by one or more groups, which may be identical or different, selected from amino, cyano, halo $(C_1-C_6)$ alkyl, cycloalkyl,  $-C(=O)NR_5R_{11}$ ,  $-C(=O)OR_5$ ,  $-OR_5$ , and  $-SR_5$ , in which  $R_5$  and  $R_{11}$ , which may be identical or different, are as defined hereinbefore,

• and the group of formula :



✓ in which  $p$  is an integer from 0 to 8 inclusive,

✓  $Z_2$  represents  $-CR_{14}R_{15}$  wherein  $R_{14}$  and  $R_{15}$ , identical or different, represent a group selected from hydrogen,  $(C_1-C_6)$ alkyl, phenyl, halo $(C_1-C_6)$ alkyl, halogen, amino,  $-OR_5$ ,

$-\text{NR}_5\text{R}_{11}$ ,  $-\text{SR}_5$  and  $-\text{C}(=\text{O})\text{OR}_5$  in which  $\text{R}_5$  and  $\text{R}_{11}$ , identical or different, are as defined hereinbefore, and

- when  $p$  is greater than or equal to 2, the hydrocarbon chain  $\text{Z}_2$  optionally contains one or more multiple bonds,
- and/or one of the carbon atoms in the hydrocarbon chain  $\text{Z}_2$  may be replaced with an oxygen atom, a sulphur atom which is optionally substituted by one or two oxygen atoms, or a nitrogen atom which is optionally substituted by  $(\text{C}_1\text{-C}_6)\text{alkyl}$ ,

✓ B represents a group selected from:

- aromatic or non-aromatic 5- or 6-membered monocycle comprising from 0 to 4 heteroatoms selected from nitrogen, oxygen and sulphur, and
- bicycle, composed of two aromatic or non-aromatic, 5- or 6-membered rings, which may be identical or different, comprising from 0 to 4 heteroatoms selected from nitrogen, oxygen and sulphur,

✓  $q$  is an integer from 0 to 7 inclusive,

✓ the group(s)  $\text{R}_{13}$ , which may be identical or different, is (are) selected from  $(\text{C}_1\text{-C}_6)\text{alkyl}$ , halogen,  $-\text{CN}$ ,  $-\text{NO}_2$ ,  $-\text{CF}_3$ ,  $-\text{OCF}_3$ ,  $(\text{C}_1\text{-C}_6)\text{acyl}$ ,  $-(\text{CH}_2)_k\text{NR}_{16}\text{R}_{17}$ ,  $-\text{X}_3-(\text{CH}_2)_k\text{NR}_{16}\text{R}_{17}$ ,  $-\text{N}(\text{R}_{16})\text{C}(=\text{O})\text{R}_{17}$ ,  $-\text{N}(\text{R}_{16})\text{C}(=\text{O})\text{OR}_{17}$ ,  $-\text{N}(\text{R}_{16})\text{SO}_2\text{R}_{17}$ ,  $-\text{N}(\text{SO}_2\text{R}_{16})_2$ ,  $-\text{OR}_{16}$ ,  $-\text{S}(\text{O})_{k_1}\text{R}_{16}$ ,  $-(\text{CH}_2)_k\text{SO}_2\text{NR}_{16}\text{R}_{17}$ ,  $-\text{X}_3(\text{CH}_2)_k\text{C}(=\text{O})\text{OR}_{16}$ ,  $-(\text{CH}_2)_k\text{C}(=\text{O})\text{OR}_{16}$ ,  $-\text{X}_3(\text{CH}_2)_k\text{C}(=\text{O})\text{NR}_{16}\text{R}_{17}$ ,  $-(\text{CH}_2)_k\text{C}(=\text{O})\text{NR}_{16}\text{R}_{17}$ ,

$-\text{C}(=\text{O})\text{O-R}_{19}\text{-NR}_{16}\text{NR}_{17}$  and  $-\text{X}_4\text{-R}_{18}$ , in which :

- $\text{X}_3$  represents a group selected from oxygen, sulphur optionally substituted by one or two oxygen atoms, and nitrogen substituted by a hydrogen atom or a  $(\text{C}_1\text{-C}_6)\text{alkyl}$  group,
- $k$  is an integer from 0 to 3 inclusive,
- $k_1$  is an integer from 0 to 2 inclusive,
- $\text{R}_{16}$  and  $\text{R}_{17}$ , which may be identical or different, are selected from hydrogen and  $(\text{C}_1\text{-C}_6)\text{alkyl}$ ,

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-  $X_4$  represents a group selected from single bond,  $-CH_2-$ , oxygen atom, sulphur atom optionally substituted by one or two oxygen atoms, and nitrogen atom substituted by hydrogen atom or  $(C_1-C_6)$ alkyl group,

-  $R_{18}$  represents an aromatic or non-aromatic, heterocyclic or non-heterocyclic, 5- or 6-membered ring, which is optionally substituted by one or more groups, which may be identical or different, selected from  $(C_1-C_6)$ alkyl, halogen, hydroxyl,  $(C_1-C_6)$ alkoxy, oxo, cyano, tetrazole,  $-NR_5R_{11}$ , and  $-C(=O)OR_5$  wherein  $R_5$  and  $R_{11}$  are as defined hereinbefore, and, when the ring is heterocyclic, it comprises from 1 to 4 heteroatoms selected from nitrogen, oxygen and sulphur,

-  $R_{19}$  represents a  $(C_1-C_6)$ alkylene group, optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof,

it being understood that:

- aryl represents a monocycle or bicycle containing from 5 to 10 and preferably 5 to 6 carbon atoms,

- heteroaryl represents aryl, as defined hereinbefore, in which one to four carbon atoms are replaced by one to four heteroatoms selected from nitrogen, oxygen and sulphur,

- cycloalkyl represents monocycle or bicycle containing from 3 to 10 and preferably from 3 to 6 carbon atoms,

- heterocycle represents heteroaryl as defined above, heteroaryl partially hydrogenated and cycloalkyl as defined above in which one to four carbon atoms are replaced by one to four heteroatoms selected from oxygen, sulphur and nitrogen,

- aryl $(C_1-C_6)$ alkyl represents a group in which alkyl contains from 1 to 6 and preferably from 1 to 4 carbon atoms and aryl contains from 5 to 10 and preferably 5 or 6 carbon atoms,

- cycloalkyl $(C_1-C_6)$ alkyl represents a group in which alkyl contains from 1 to 6 and preferably from 1 to 3 carbon atoms and cycloalkyl contains from 3 to 10 carbon atoms.

2- A compound according to claim 1 characterized in that:

W is  $C-R_1$  and X is N or  $C-R_2$  in which  $R_1$  and  $R_2$ , identical or different, are selected from hydrogen and methyl,

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Y is O,

Z represents an oxygen atom or -NH group,

n is an integer from 0 to 4 inclusive,

Z<sub>1</sub> represents a group -CR<sub>9</sub>R<sub>10</sub> wherein R<sub>9</sub> and R<sub>10</sub>, identical or different, represent a group selected from hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, halogen, -NR<sub>5</sub>R<sub>11</sub>, -OR<sub>5</sub>, -SR<sub>5</sub> and -C(=O)OR<sub>5</sub> in which R<sub>5</sub> and R<sub>11</sub>, identical or different, represent hydrogen atom or (C<sub>1</sub>-C<sub>6</sub>)alkyl, and

- when n is greater than or equal to 2, the hydrocarbon chain Z<sub>1</sub> optionally contains one double bonds,
- and/or one of the carbon atoms in the hydrocarbon chain Z<sub>1</sub> may be replaced with an oxygen atom, a sulphur atom which is optionally substituted by one or two oxygen atoms, or a nitrogen atom which is optionally substituted by (C<sub>1</sub>-C<sub>6</sub>)alkyl,

R<sub>3</sub>, R<sub>4</sub> and A are as defined in the compound of formula (I), optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

3- A compound according to claim 1 characterized in that:

R<sub>3</sub> represents the group of formula :



- ✓ in which p is an integer from 0 to 4 inclusive,

- ✓ Z<sub>2</sub> represents -CR<sub>14</sub>R<sub>15</sub> wherein R<sub>14</sub> and R<sub>15</sub>, identical or different, represent a group selected from hydrogen and methyl, and when p is greater than or equal to 2, the hydrocarbon chain Z<sub>2</sub> optionally contains one double bond,

✓ B represents a group selected from phenyl, pyridyl, thienyl, imidazolyl, furyl, 1,3-benzodioxolyl, benzodioxinyl, benzothienyl, benzofuryl, 2,1,3-benzothiadiazolyl, benzofurazanyl, and indolyl,

✓ q is an integer from 0 to 7 inclusive,

5 ✓ the group(s)  $R_{13}$ , which may be identical or different, is (are) selected from  $(C_1-C_6)$ alkyl, halogen, -CN, -CF<sub>3</sub>, -NR<sub>16</sub>R<sub>17</sub>, -OR<sub>16</sub>, -SO<sub>2</sub>R<sub>16</sub>, -(CH<sub>2</sub>)<sub>k</sub>SO<sub>2</sub>NR<sub>16</sub>R<sub>17</sub>, -O(CH<sub>2</sub>)<sub>k</sub>C(=O)OR<sub>16</sub>, -(CH<sub>2</sub>)<sub>k</sub>C(=O)OR<sub>16</sub>, -O(CH<sub>2</sub>)<sub>k</sub>C(=O)NR<sub>16</sub>R<sub>17</sub>, -C(=O)O-R<sub>19</sub>-NR<sub>16</sub>NR<sub>17</sub> and -(CH<sub>2</sub>)<sub>k</sub>C(=O)NR<sub>16</sub>R<sub>17</sub>, in which k is an integer from 0 to 3 inclusive, R<sub>16</sub> and R<sub>17</sub>, which may be identical or different, are selected from hydrogen and (C<sub>1</sub>-C<sub>6</sub>)alkyl, and R<sub>19</sub> represents a (C<sub>1</sub>-C<sub>6</sub>)alkylene group,

W, X, Y, Z, Z<sub>1</sub>, n, m, A and R<sub>4</sub> are as defined in the compound of formula (I), optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

4- A compound according to claim 1 characterized in that:

n is an integer from 0 to 4 inclusive,

15 Z<sub>1</sub> represents a group -CR<sub>9</sub>R<sub>10</sub> wherein R<sub>9</sub> and R<sub>10</sub> represent each hydrogen atom, and

- when n is greater than or equal to 2, the hydrocarbon chain Z<sub>1</sub> optionally contains one double bond,
- and/or one of the carbon atoms in the hydrocarbon chain Z<sub>1</sub> may be replaced with an oxygen atom, a sulphur atom which is optionally substituted by one or two oxygen atoms,
- 20 or a nitrogen atom which is optionally substituted by (C<sub>1</sub>-C<sub>6</sub>)alkyl,

A represents a group selected from phenyl, pyridyl, thienyl, imidazolyl, furyl, 1,3-benzodioxolyl, benzodioxinyl, benzothienyl, benzofuryl, 2,1,3-benzothiadiazolyl, benzofurazanyl, and indolyl,

25 m is an integer from 0 to 7 inclusive,

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the group(s)  $R_4$ , which may be identical or different, is (are) selected from  $(C_1-C_6)$ alkyl, halogen,  $-CN$ ,  $-CF_3$ ,  $-NR_5R_{11}$ ,  $-OR_5$ , and  $-C(=O)OR_5$  in which  $R_5$  and  $R_{11}$ , which may be identical or different, are selected from hydrogen and  $(C_1-C_6)$ alkyl,

W, X, Y, Z and  $R_3$  are as defined in the compound of formula (I),

5 optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

5- A compound according to claim 1 characterized in that:

W is  $C-R_1$  and X is N or  $C-R_2$  in which  $R_1$  and  $R_2$ , identical or different, are selected from hydrogen and methyl,

10 Y is O,

Z represents an oxygen atom or  $-NH$  group,

n is an integer from 0 to 4 inclusive,

$Z_1$  represents a group  $-CR_9R_{10}$  wherein  $R_9$  and  $R_{10}$ , identical or different, represent a group selected from hydrogen and methyl, and

- 15
- when n is greater than or equal to 2, the hydrocarbon chain  $Z_1$  optionally contains one or more multiple bonds,
  - and/or one of the carbon atoms in the hydrocarbon chain  $Z_1$  may be replaced with an oxygen atom, a sulphur atom which is optionally substituted by one or two oxygen atoms, or a nitrogen atom which is optionally substituted by  $(C_1-C_6)$ alkyl,

20 A represents a group selected from phenyl, pyridyl, thienyl, imidazolyl, furyl, 1,3-benzodioxolyl, benzodioxinyl, benzothienyl, benzofuryl, 2,1,3-benzothiadiazolyl, benzofurazanyl, and indolyl,

m is an integer from 0 to 7 inclusive,

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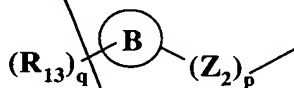
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the group(s)  $R_4$ , which may be identical or different, is (are) selected from  $(C_1-C_6)$ alkyl, halogen,  $-CN$ ,  $-CF_3$ ,  $-NR_5R_{11}$ ,  $-OR_5$ ,  $-SO_2R_5$ ,  $-(CH_2)_kSO_2NR_5R_{11}$ ,  $-X_1(CH_2)_kC(=O)OR_5$ ,  $-(CH_2)_kC(=O)OR_5$ ,  $-X_1(CH_2)_kC(=O)NR_5R_{11}$ ,  $-(CH_2)_kC(=O)NR_5R_{11}$ , and  $-X_2-R_{12}$  in which:

- ✓  $X_1$  represents a group selected from oxygen, sulphur and  $-NH$ ,
- ✓  $k$  is an integer from 0 to 3 inclusive,
- ✓  $R_5$  and  $R_{11}$ , which may be identical or different, are selected from hydrogen and  $(C_1-C_6)$ alkyl,
- ✓  $X_2$  represents a group selected from single bond,  $-CH_2-$ , oxygen atom, and sulphur atom optionally substituted by one or two oxygen atoms,
- ✓  $R_{12}$  represents an aromatic or non-aromatic, heterocyclic or non-heterocyclic, 5- or 6-membered ring which is optionally substituted by one or more groups, which may be identical or different, selected from  $(C_1-C_6)$ alkyl, halogen, hydroxyl and amino, and when the ring is heterocyclic, it comprises from 1 to 4 heteroatoms selected from nitrogen, oxygen and sulphur;

$R_3$  represents the group of formula:



- ✓ in which  $p$  is an integer from 0 to 6 inclusive,
- ✓  $Z_2$  represents  $-CR_{14}R_{15}$  wherein  $R_{14}$  and  $R_{15}$ , identical or different, represent a group selected from hydrogen,  $(C_1-C_6)$ alkyl, phenyl, halo $(C_1-C_6)$ alkyl, halogen, amino,  $OR_5$ ,  $SR_5$  and  $-C(=O)OR_5$  in which  $R_5$  is as defined in the compound of formula (I), and
  - when  $p$  is greater than or equal to 2, the hydrocarbon chain  $Z_2$  optionally contains one or more multiple bonds,

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- and/or one of the carbon atoms in the hydrocarbon chain  $Z_2$  may be replaced with an oxygen atom, a sulphur atom which is optionally substituted by one or two oxygen atoms, or a nitrogen atom which is optionally substituted by  $(C_1-C_6)$ alkyl,

✓ B represents a group selected from:

- aromatic or non-aromatic 5- or 6-membered monocycle comprising from 0 to 4 heteroatoms selected from nitrogen, oxygen and sulphur, and
- bicycle, composed of two aromatic or non-aromatic, 5- or 6-membered rings, which may be identical or different, comprising from 0 to 4 heteroatoms selected from nitrogen, oxygen and sulphur,

✓ q is an integer from 0 to 7 inclusive,

✓ the group(s)  $R_{13}$ , which may be identical or different, is (are) selected from  $(C_1-C_6)$ alkyl, halogen, -CN, -CF<sub>3</sub>, -NR<sub>16</sub>R<sub>17</sub>, -OR<sub>16</sub>, -SO<sub>2</sub>R<sub>16</sub>, -(CH<sub>2</sub>)<sub>k</sub>SO<sub>2</sub>NR<sub>16</sub>R<sub>17</sub>, -X<sub>3</sub>(CH<sub>2</sub>)<sub>k</sub>C(=O)OR<sub>16</sub>, -(CH<sub>2</sub>)<sub>k</sub>C(=O)OR<sub>16</sub>, -X<sub>3</sub>(CH<sub>2</sub>)<sub>k</sub>C(=O)NR<sub>16</sub>R<sub>17</sub>, -(CH<sub>2</sub>)<sub>k</sub>C(=O)NR<sub>16</sub>R<sub>17</sub>, -C(=O)O-R<sub>19</sub>-NR<sub>16</sub>NR<sub>17</sub> and -X<sub>4</sub>-R<sub>18</sub>, in which :

- X<sub>3</sub> represents a group selected from oxygen atom, sulphur atom and -NH group,
- k is an integer from 0 to 3 inclusive,
- R<sub>16</sub> and R<sub>17</sub>, which may be identical or different, are selected from hydrogen and  $(C_1-C_6)$ alkyl,
- X<sub>4</sub> represents a group selected from single bond, -CH<sub>2</sub>-, oxygen atom, and sulphur atom optionally substituted by one or two oxygen atoms,
- R<sub>18</sub> represents an aromatic or non-aromatic, heterocyclic or non-heterocyclic, 5- or 6-membered ring, which is optionally substituted by one or more groups, which may be identical or different, selected from  $(C_1-C_6)$ alkyl, halogen, hydroxyl, and amino, and when the ring is heterocyclic, it comprises from 1 to 4 heteroatoms selected from nitrogen, oxygen and sulphur,
- R<sub>19</sub> represents a  $(C_1-C_6)$ alkylene group,

optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

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6- A compound according to claim 1 characterized in that:

W is C-R<sub>1</sub> and X is N or C-R<sub>2</sub> in which R<sub>1</sub> and R<sub>2</sub>, identical or different, are selected from hydrogen and methyl,

Y is O,

5 Z represents an oxygen atom or a -NH group,

n is an integer from 0 to 4 inclusive,

Z<sub>1</sub> represents a group -CR<sub>9</sub>R<sub>10</sub> wherein R<sub>9</sub> and R<sub>10</sub>, identical or different, represent a group selected from hydrogen and methyl, and

- when n is greater than or equal to 2, the hydrocarbon chain Z<sub>1</sub> optionally contains one double bond,
- and/or one of the carbon atoms in the hydrocarbon chain Z<sub>1</sub> may be replaced with an oxygen atom, a sulphur atom which is optionally substituted by one or two oxygen atoms, or a nitrogen atom which is optionally substituted by (C<sub>1</sub>-C<sub>6</sub>)alkyl,

15 A represents a group selected from phenyl, pyridyl, thienyl, imidazolyl, furyl, 1,3-benzodioxolyl, benzodioxinyl, benzothienyl, benzofuryl, 2,1,3-benzothiadiazolyl, benzofurazanyl, and indolyl,

m is an integer from 0 to 7 inclusive,

20 the group(s) R<sub>4</sub>, which may be identical or different, is (are) selected from (C<sub>1</sub>-C<sub>6</sub>)alkyl, halogen, -CN, -CF<sub>3</sub>, -NR<sub>5</sub>R<sub>11</sub>, -OR<sub>5</sub>, and -C(=O)OR<sub>5</sub>, in which R<sub>5</sub> and R<sub>11</sub>, which may be identical or different, are selected from hydrogen and (C<sub>1</sub>-C<sub>6</sub>)alkyl,

R<sub>3</sub> represents the group of formula:



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- ✓ in which p is an integer from 0 to 4 inclusive,
- ✓  $Z_2$  represents  $-CR_{14}R_{15}$  wherein  $R_{14}$  and  $R_{15}$ , identical or different, represent a group selected from hydrogen and methyl, and
- when p is greater than or equal to 2, the hydrocarbon chain  $Z_2$  optionally contains one double bond,
  - and/or one of the carbon atoms in the hydrocarbon chain  $Z_2$  may be replaced with an oxygen atom, a sulphur atom which is optionally substituted by one or two oxygen atoms, or a nitrogen atom which is optionally substituted by  $(C_1-C_6)$ alkyl,
- ✓ B represents a group selected from phenyl, pyridyl, thienyl, imidazolyl, furyl, 1,3-benzodioxolyl, benzodioxinyl, benzothienyl, benzofuryl, 2,1,3-benzothiadiazolyl, benzofurazanyl, and indolyl,
- ✓ q is an integer from 0 to 7 inclusive,
- ✓ the group(s)  $R_{13}$ , which may be identical or different, is (are) selected from  $(C_1-C_6)$ alkyl, halogen,  $-CN$ ,  $-CF_3$ ,  $-NR_{16}R_{17}$ ,  $-OR_{16}$ ,  $-SO_2R_{16}$ ,  $-(CH_2)_kSO_2NR_{16}R_{17}$ ,  $-X_3(CH_2)_kC(=O)OR_{16}$ ,  $-(CH_2)_kC(=O)OR_{16}$ ,  $-X_3(CH_2)_kC(=O)NR_{16}R_{17}$ ,  $-(CH_2)_kC(=O)NR_{16}R_{17}$ ,  $-C(=O)O-R_{19}-NR_{16}NR_{17}$ , and  $-X_4-R_{18}$ , in which :
- $X_3$  represents a group selected from oxygen atom, sulphur atom and  $-NH$  group,
  - k is an integer from 0 to 3 inclusive,
  - $R_{16}$  and  $R_{17}$ , which may be identical or different, are selected from hydrogen and  $(C_1-C_6)$ alkyl,
  - $X_4$  represents a group selected from single bond,  $-CH_2-$ , oxygen atom, and sulphur atom optionally substituted by one or two oxygen atoms,
  - $R_{18}$  represents an aromatic or non-aromatic, heterocyclic or non-heterocyclic, 5- or 6-membered ring, which is optionally substituted by one or more groups, which may be identical or different, selected from  $(C_1-C_6)$ alkyl, halogen, hydroxyl, and amino, and when the ring is heterocyclic, it comprises from 1 to 4 heteroatoms selected from nitrogen, oxygen and sulphur,
  - $R_{19}$  represents a  $(C_1-C_6)$ alkylene group,

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optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

7- A compound according to claim 1 characterized in that:

W is C-R<sub>1</sub> and X is N or C-R<sub>2</sub> in which R<sub>1</sub> and R<sub>2</sub>, identical or different, are selected from hydrogen and methyl,

Y is O,

Z represents an oxygen atom or a -NH group,

n is an integer from 0 to 4 inclusive,

Z<sub>1</sub> represents a methylen group, and

- when n is greater than or equal to 2, the hydrocarbon chain Z<sub>1</sub> optionally contains one double bond,
- and/or one of the carbon atoms in the hydrocarbon chain Z<sub>1</sub> may be replaced with an oxygen atom, a sulphur atom which is optionally substituted by one or two oxygen atoms, or a nitrogen atom which is optionally substituted by (C<sub>1</sub>-C<sub>6</sub>)alkyl,

A represents a group selected from phenyl, pyridyl, thienyl, imidazolyl, furyl, 1,3-benzodioxolyl, benzodioxinyl, benzothieryl, benzofuryl, 2,1,3-benzothiadiazolyl, benzofurazanyl, and indolyl,

m is an integer from 0 to 7 inclusive,

the group(s) R<sub>4</sub>, which may be identical or different, is (are) selected from (C<sub>1</sub>-C<sub>6</sub>)alkyl, halogen, -CN, -CF<sub>3</sub>, -NR<sub>5</sub>R<sub>11</sub>, -OR<sub>5</sub>, and -C(=O)OR<sub>5</sub>, in which R<sub>5</sub> and R<sub>11</sub>, which may be identical or different, are selected from hydrogen and (C<sub>1</sub>-C<sub>6</sub>)alkyl,

R<sub>3</sub> represents the group of formula:

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- ✓ in which p is an integer from 0 to 4 inclusive,
- ✓  $Z_2$  represents  $-CR_{14}R_{15}$  wherein  $R_{14}$  and  $R_{15}$ , identical or different, represent a group selected from hydrogen and methyl, and when p is greater than or equal to 2, the hydrocarbon chain  $Z_2$  optionally contains one double bond,
5. ✓ B represents a group selected from phenyl, pyridyl, thienyl, imidazolyl, furyl, 1,3-benzodioxolyl, benzodioxinyl, benzothienyl, benzofuryl, 2,1,3-benzothiadiazolyl, benzofurazanyl, and indolyl,
- ✓ q is an integer from 0 to 7 inclusive,
- 10 ✓ the group(s)  $R_{13}$ , which may be identical or different, is (are) selected from  $(C_1-C_6)$ alkyl, halogen,  $-CN$ ,  $-CF_3$ ,  $-NR_{16}R_{17}$ ,  $-OR_{16}$ ,  $-SO_2R_{16}$ ,  $-(CH_2)_kSO_2NR_{16}R_{17}$ ,  $-O(CH_2)_kC(=O)OR_{16}$ ,  $-(CH_2)_kC(=O)OR_{16}$ ,  $-O(CH_2)_kC(=O)NR_{16}R_{17}$ ,  $-(CH_2)_kC(=O)NR_{16}R_{17}$ , and  $-C(=O)O-R_{19}-NR_{16}NR_{17}$  in which :
- 15 - k is an integer from 0 to 3 inclusive,
- $R_{16}$  and  $R_{17}$ , which may be identical or different, are selected from hydrogen and  $(C_1-C_6)$ alkyl,
- $R_{19}$  represents a  $(C_1-C_6)$ alkylene group
- optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.
- 20 8- A compound according to claim 1 wherein n is equal to one, optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.
- 9- A compound according to claim 1 wherein  $Z_1$  represents a group  $-CR_9R_{10}$  in which  $R_9$  and  $R_{10}$  represent each a hydrogen atom, optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its the pharmaceutically acceptable salts thereof.

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10- A compound according to claim 1 wherein A represents a 5- to 6- membered aromatic monocycle or a 3,4-methylenedioxyphenyl group optionally substituted by one or more groups  $R_4$  as defined in the compound of formula (I), optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

5 11- A compound according to claim 10 wherein A represents a phenyl group optionally substituted by one group  $R_4$  as defined in the compound of the formula (I), optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

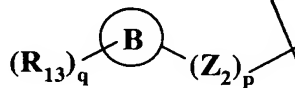
10 12- A compound according to claim 11 wherein A represents a phenyl group, m is equal to one, and  $R_4$  represents a methoxy group or a fluoro group, optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

13- A compound according to claim 10 wherein A represents a 4-pyridinyl group and m is equal to zero, optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

15 14 - A compound according to claim 1 wherein Z represents a -NH group and Y represents an oxygen atom, optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

20 15 - A compound according to claim 1 wherein W represents a -CH group and X represents a nitrogen atom, optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

16- A compound according to claim 1 wherein  $R_3$  represent a group of formula :



in which p is equal to one,  $Z_2$  represents a methylene group, B represents a phenyl group , q is comprise between 0 to 1 inclusive,  $R_{13}$  represents a group selected from -CN,

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$-(CH_2)_k-C(=O)OR_{16}$ ,  $-(CH_2)_k-C(=O)NR_{16}R_{17}$ , and  $-C(=O)O-R_{19}-NR_{16}NR_{17}$  in which  $k$ ,  $R_{16}$ ,  $R_{17}$ , and  $R_{19}$  are as defined in the compound of formula (I), optionally, its racemic forms, isomers thereof, N-oxydes thereof, and its pharmaceutically acceptable salts thereof.

**17-** A compound according to claim 1 selected from:

- benzyl 4-benzyl-5-oxo-4*H*-[1,2,4]triazolo[4,3-*a*]quinazol-7-ylcarboxylate,
- 4-pyridylmethyl 4-benzyl-5-oxo-4*H*-[1,2,4]triazolo[4,3-*a*]quinazol-7-ylcarboxylate,
- *N*-(3,4-methylenedioxybenzyl)-4-benzyl-5-oxo-4*H*-[1,2,4]triazolo[4,3-*a*]quinazol-7-ylcarboxamide,
- *N*-(4-pyridylmethyl)-4-benzyl-5-oxo-4*H*-[1,2,4]triazolo[4,3-*a*]quinazol-7-ylcarboxamide,
- *N*-(3,4-methylenedioxybenzyl)-4-benzyl-5-oxo-4*H*-imidazo[1,2-*a*]quinazol-7-ylcarboxamide,
- *N*-(4-pyridylmethyl)-4-benzyl-5-oxo-4*H*-imidazo[1,2-*a*]quinazol-7-ylcarboxamide,
- *N*-(4-methoxybenzyl)-4-benzyl-5-oxo-4,5-dihydro[1,2,4]triazolo[4,3-*a*]quinazoline-7-carboxamide,
- *N*-[3-(4-pyridylsulphonyl)propyl]-4-benzyl-5-oxo-4,5-dihydro[1,2,4]triazolo-[4,3-*a*]quinazoline-7-carboxamide,
- *N*-(3,4-Methylenedioxybenzyl)-4-(4-cyanobenzyl)-5-oxo-4*H*-[1,2,4]triazolo[4,3-*a*]quinazol-7-ylcarboxamide
- Methyl 4-{7-[(1,3-benzodioxol-5-ylmethyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazol-4-ylmethyl} benzoate
- Methyl 4-{7-[(4-methoxybenzyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazol-4-ylmethyl} benzoate
- Methyl 4-{7-[(pyridin-4-ylmethyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazol-4-ylmethyl} benzoate
- (2-Dimethylamino-ethyl) 4-[7-(4-fluoro-benzylcarbamoyl)-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazol-4-ylmethyl] benzoate
- 4-(4-Dimethylcarbamoyl-benzyl)-5-oxo-4,5-dihydro-[1,2,4]triazolo[4,3-*a*]quinazoline-7-carboxylic acid 4-methoxy-benzylamide
- *N*-(pyridin-4ylmethyl)-4-(4-cyanobenzyl)-5-oxo-4*H*-[1,2,4]triazolo[4,3-*a*]quinazol-7-ylcarboxamide

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- Methyl (4-{7-[(1,3-benzodioxol-5-ylmethyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazolin-4-ylmethyl}-phenyl)-acetate
  - Methyl (4-{7-[(4-methoxy)-benzylcarbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazolin-4-ylmethyl}-phenyl)-acetate
  - 5 - Methyl (4-{7-[(pyridin-4-yl)-methylcarbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazolin-4-ylmethyl}-phenyl)-acetate
  - *N*-(pyridin-4-ylmethyl) 4-[3-(pyridin-4-yl)-2-propen-1-yl]-5-oxo-4*H*-[1,2,4]triazolo[4,3-*a*]quinazol-7-ylcarboxamide
  - 4-[2-(4-Chloro-phenoxy)-ethyl]-5-oxo-4,5-dihydro-[1,2,4]triazolo[4,3-*a*]quinazoline-7-carboxylic acid 4-methoxy-benzylamide
  - 10 - 4-{7-[(4-methoxybenzyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*] quinazol-4-ylmethyl} benzoic acid
  - 4-{7-[(1,3-benzodioxol-5-ylmethyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo [4,3-*a*]quinazol-4-ylmethyl} benzoic acid
  - 15 - 4-{7-[(pyridin-4-ylmethyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*] quinazol-4-ylmethyl} benzoic acid
  - 4-{7-[(4-fluoro)-benzylcarbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*] quinazol-4-ylmethyl} benzoic acid
  - (4-{7-[(4-methoxy)-benzylcarbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*] quinazolin-4-ylmethyl}-phenyl)-acetic acid
  - 20 - (4-{7-[(1,3-benzodioxol-5-ylmethyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazolin-4-ylmethyl}-phenyl)-acetic acid, and
  - (4-{7-[(pyridin-4-yl)-methylcarbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazolin-4-ylmethyl}-phenyl)-acetic acid.

25 **18-** A compound according to claim 1 selected from :

benzyl 4-benzyl-5-oxo-4*H*-[1,2,4]triazolo[4,3-*a*]quinazol-7-ylcarboxylate,  
4-pyridylmethyl 4-benzyl-5-oxo-4*H*-[1,2,4]triazolo[4,3-*a*]quinazol-7-ylcarboxylate,  
*N*-(3,4-methylenedioxybenzyl)-4-benzyl-5-oxo-4*H*-[1,2,4]triazolo[4,3-*a*]quinazol-7-ylcarboxamide,

30 *N*-(4-methoxybenzyl)-4-benzyl-5-oxo-4,5-dihydro[1,2,4]triazolo[4,3-*a*]quinazoline-7-carboxamide,

*N*-(3,4-Methylenedioxybenzyl)-4-(4-cyanobenzyl)-5-oxo-4*H*-[1,2,4]triazolo[4,3-*a*]quinazol-7-ylcarboxamide

Methyl 4-{7-[(1,3-benzodioxol-5-ylmethyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazol-4-ylmethyl} benzoate

5 Methyl 4-{7-[(4-methoxybenzyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazol-4-ylmethyl} benzoate

4-(4-Dimethylcarbamoyl-benzyl)-5-oxo-4,5-dihydro-[1,2,4]triazolo[4,3-*a*]quinazoline-7-carboxylic acid 4-methoxy-benzylamide

Methyl (4-{7-[(1,3-benzodioxol-5-ylmethyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazolin-4-ylmethyl}-phenyl)-acetate

Methyl (4-{7-[(4-methoxy)-benzylcarbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazolin-4-ylmethyl}-phenyl)-acetate

4-{7-[(4-methoxybenzyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazol-4-ylmethyl} benzoic acid

15 4-{7-[(1,3-benzodioxol-5-ylmethyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazol-4-ylmethyl} benzoic acid

4-{7-[(pyridin-4-ylmethyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazol-4-ylmethyl} benzoic acid

4-{7-[(4-fluoro)-benzylcarbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazol-4-ylmethyl} benzoic acid

20 (4-{7-[(4-methoxy)-benzylcarbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazolin-4-ylmethyl}-phenyl)-acetic acid

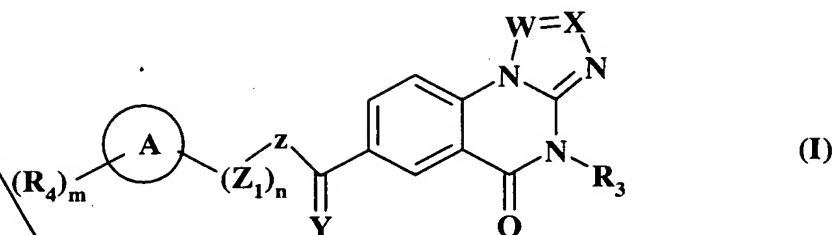
(4-{7-[(1,3-benzodioxol-5-ylmethyl)-carbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazolin-4-ylmethyl}-phenyl)-acetic acid, and

25 (4-{7-[(pyridin-4-yl)-methylcarbamoyl]-5-oxo-5*H*-[1,2,4]triazolo[4,3-*a*]quinazolin-4-ylmethyl}-phenyl)-acetic acid.

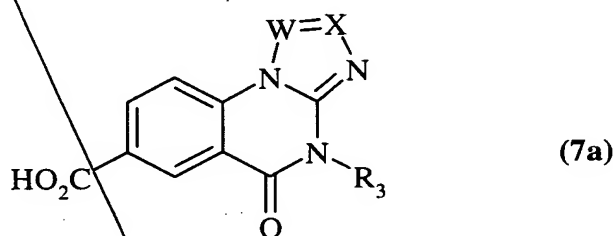
19. Process for manufacturing a compound of general formula (I)

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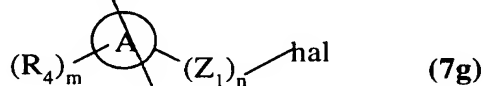
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in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in claim 1, Y is O and Z is O, the said process being characterized in that it comprises the reaction of the compound of formula (7a):

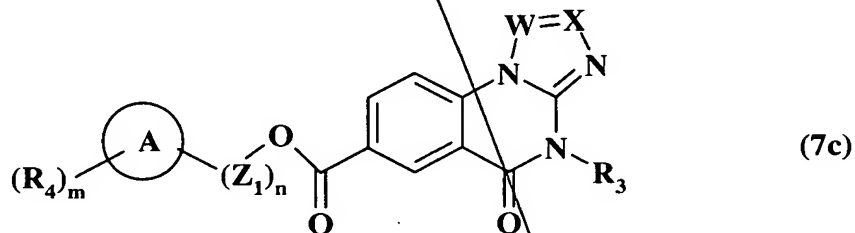


in which W, X, and R<sub>3</sub> are as defined in the compound of formula (I), with the compound of general formula (7g), in the presence of a base:



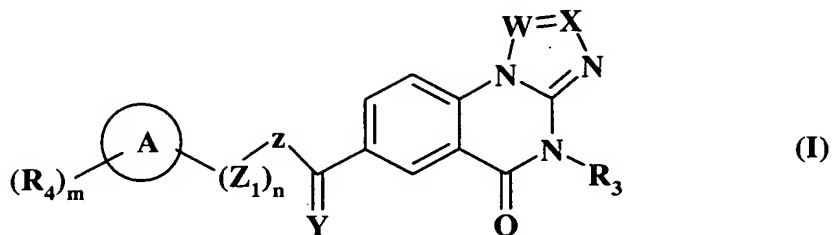
in which hal is a halogen atom, and in which R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as in the compound of formula (I),

to give the compound of general formula (7c), which is a particular case of the compounds of formula (I):

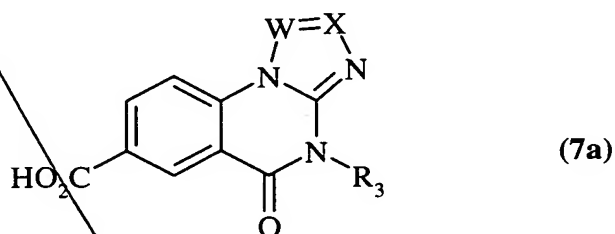


in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined hereinbefore.

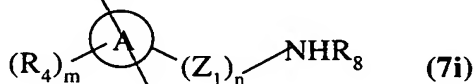
20. Process for manufacturing a compound of general formula (I)



in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in claim 1, Y is O and Z is -NR<sub>8</sub>, in which R<sub>8</sub> is as defined in claim 1, the said process being characterized in that it comprises the reaction of the compound of formula (7a):

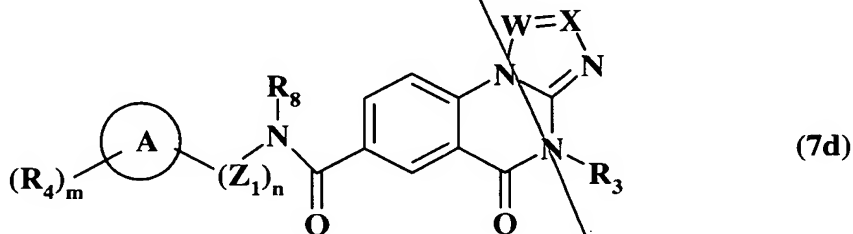


in which W, X, and R<sub>3</sub> are as defined in the compound of formula (I), with the compound of general formula (7i) :



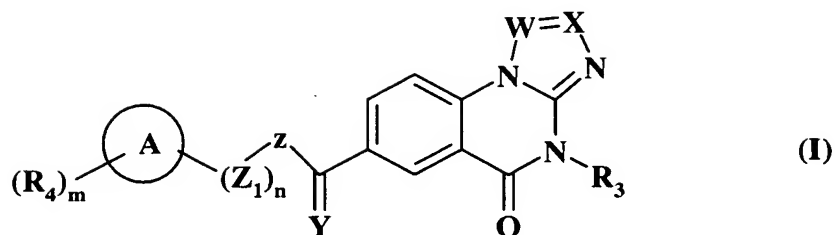
in which R<sub>4</sub>, R<sub>8</sub>, n, m, Z<sub>1</sub> and A are as defined in the compound of formula (I),

by activating the acid function with an activator, in the presence of diisopropylethylamine (DIPEA) and in a solvent, to give the compound of general formula (7d), which is a particular case of the compounds of formula (I):

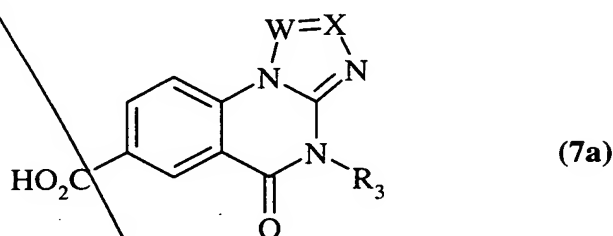


in which W, X, R<sub>3</sub>, R<sub>4</sub>, R<sub>8</sub>, n, m, Z<sub>1</sub> and A are as defined hereinbefore.

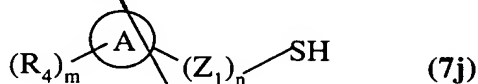
21 - Process for manufacturing a compound of general formula (I),



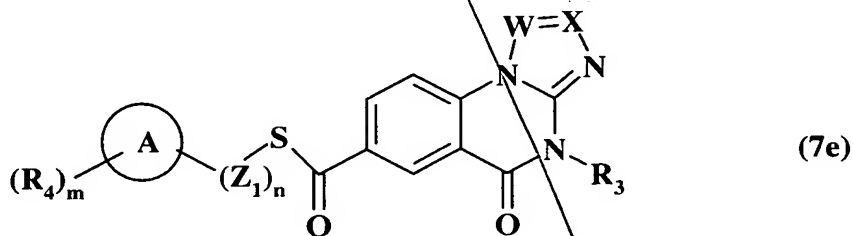
in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in claim 1, Y is O and Z is S, the said process being characterized in that it comprises the reaction of the compound of formula (7a):



in which W, X, and R<sub>3</sub> are as defined in the compound of formula (I), with the compound of general formula (7j):

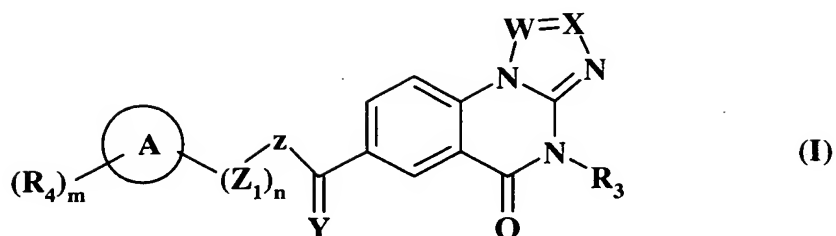


in which R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in the compound of formula (I), by activating the acid function with an activator, in the presence of DIPEA in a solvent, to give the compound of general formula (7e), which is a particular case of the compounds of formula (I):

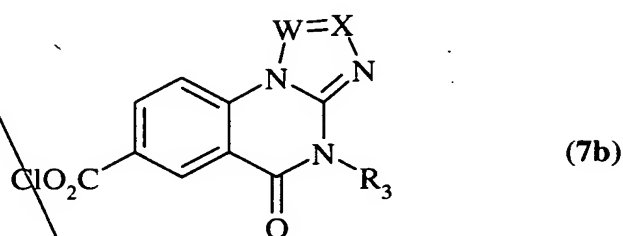


in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined hereinbefore.

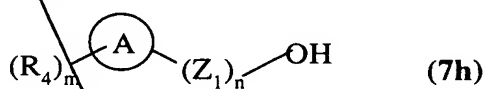
22 -. Process for manufacturing a compound of general formula (I),



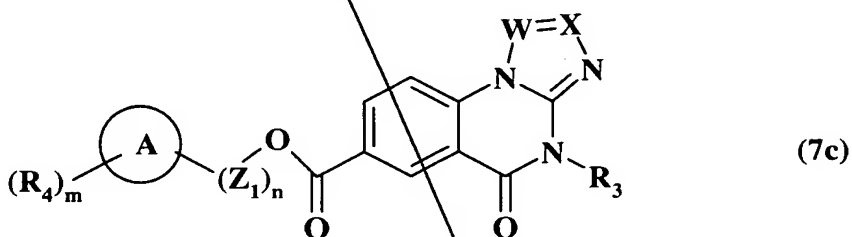
in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in claim 1, Y is O and Z is O, the said process being characterized in that it comprises the reaction of the compound of formula (7b):



in which W, X, and R<sub>3</sub> are as defined in the compound of formula (I), with the compound of formula (7h):

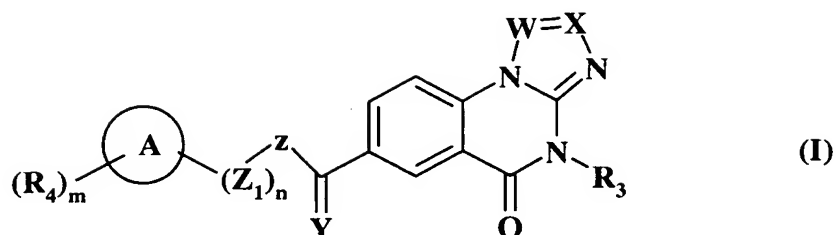


in which R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in the compound of formula (I), in the presence of a base, to give the compound of general formula (7c), which is a particular case of the compounds of formula (I):

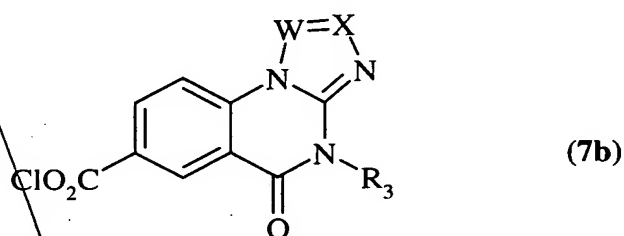


in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined hereinbefore.

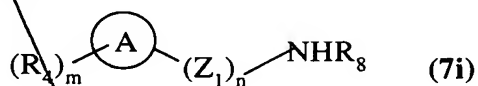
23 -. Process for manufacturing a compound of general formula (I),



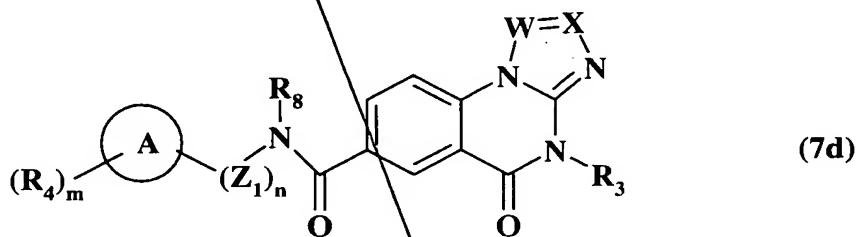
in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in claim 1, Y is O and Z is -NR<sub>8</sub>, in which R<sub>8</sub> is as defined in claim 1, the said process being characterized in that it comprises the reaction of the compound of formula (7b):



in which W, X, and R<sub>3</sub> are as defined in the compound of formula (I), with the compound of formula (7i):



in which R<sub>4</sub>, R<sub>8</sub>, n, m, Z<sub>1</sub> and A are as defined in the compound of formula (I), in the presence of a base, to give the compound of general formula (7d), which is a particular case of the compounds of formula (I):



in which W, X, R<sub>3</sub>, R<sub>4</sub>, R<sub>8</sub>, n, m, Z<sub>1</sub> and A are as defined hereinbefore.

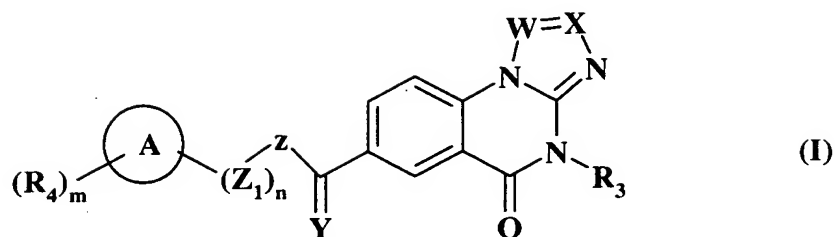
24 -. Process for manufacturing a compound of general formula (I),

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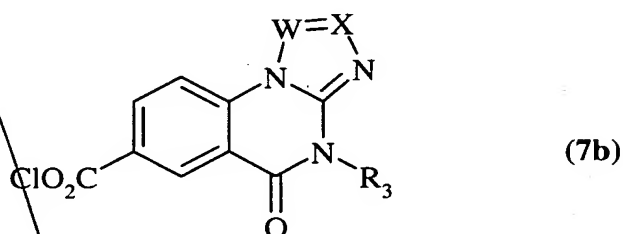
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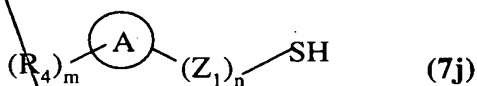
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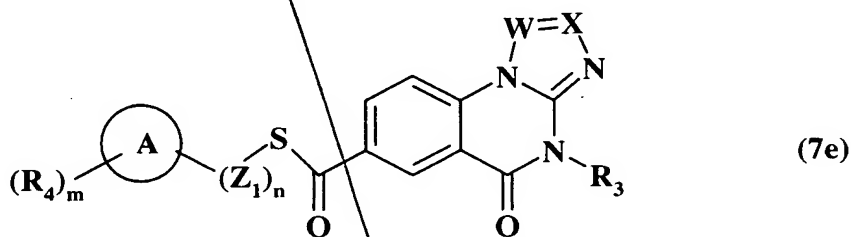
in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined above, Y is O and Z is S, the said process being characterized in that it comprises the reaction of the compound of formula (7b):



in which W, X, and R<sub>3</sub> are as defined in the compound of formula (I), with the compound of general formula (7j):



in which R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in the compound of formula (I), to give the compound of general formula (7e), which is a particular case of the compounds of formula (I):



in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined hereinbefore.

25 -. Process for manufacturing a compound of general formula (I),

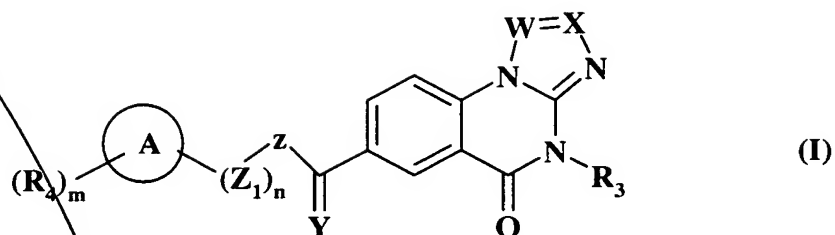
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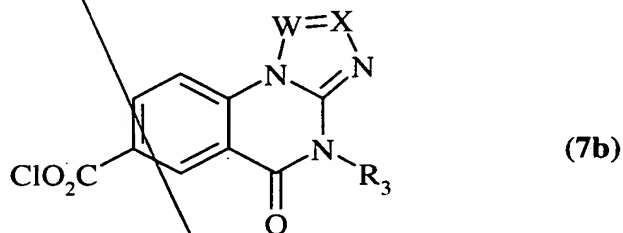
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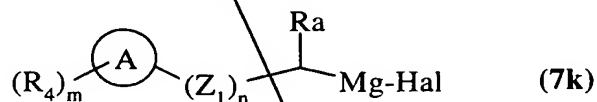




in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined above, Y is O and Z is -CHRa, in which Ra represents a group selected from hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, aromatic heterocycle, non-aromatic heterocycle, and cycloalkyl, the said process being characterized in that it comprises the reaction of the compound of formula (7b):

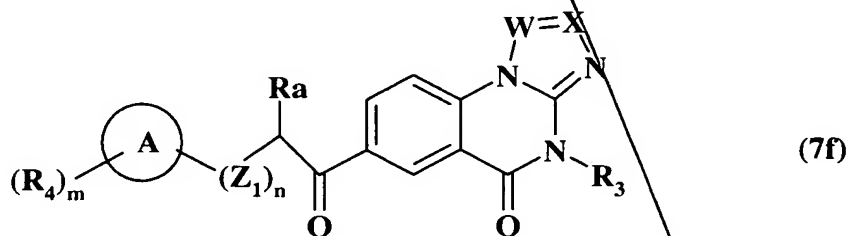


in which W, X, and R<sub>3</sub> are as defined in the compound of formula (I), with the compound of general formula (7k):



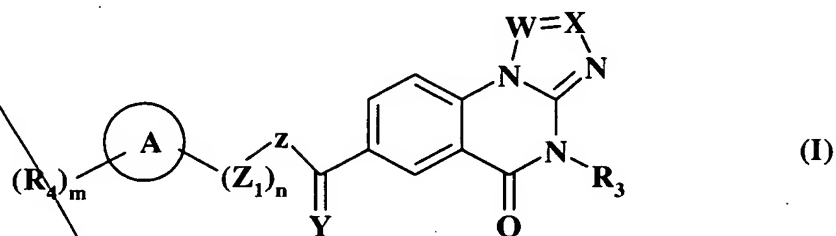
in which Ra represents a group selected from hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, aromatic heterocycle, non-aromatic heterocycle, and cycloalkyl, Hal represents a halogen atom, and R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in the compound of formula (I),

to give the compound of general formula (7f), which is a particular case of the compounds of formula (I):

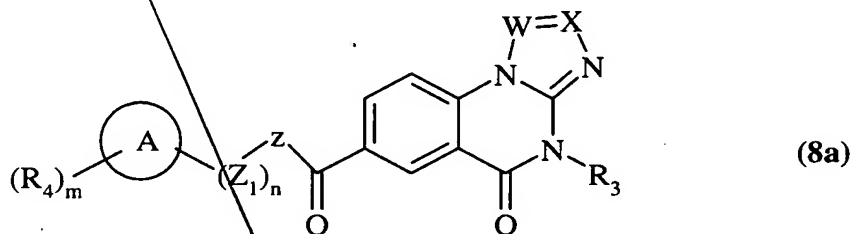


in which W, X, R<sub>3</sub>, R<sub>4</sub>, Ra, n, m, Z<sub>1</sub> and A are as defined hereinbefore.

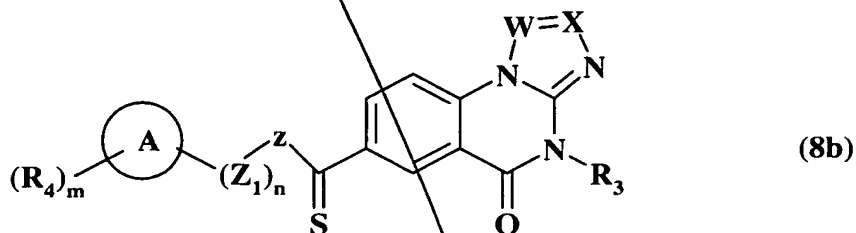
26 -. Process for manufacturing a compound of general formula (I),



in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z, Z<sub>1</sub> and A are as defined in claim 1, and Y is S, the said process being characterized in that it comprises the reaction of the compound (8a):

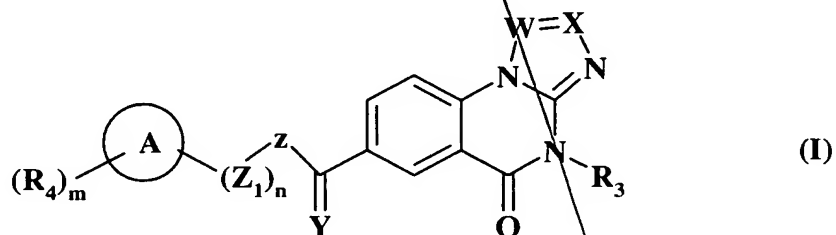


in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z, Z<sub>1</sub> and A are as defined in the compound of formula (I), with Lawesson's reagent or P<sub>2</sub>S<sub>5</sub>, to give the compound of general formula (8b), which is a particular case of the compounds of formula (I):

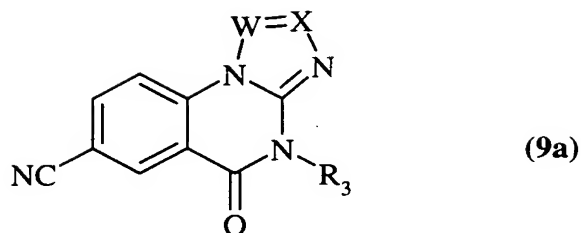


in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z, Z<sub>1</sub> and A are as defined hereinbefore.

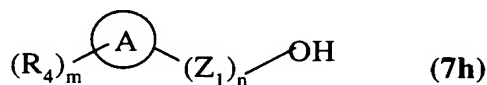
27 -. Process for manufacturing a compound of general formula (I),



in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in claim 1, Y is NH and Z is O, the said process being characterized in that it comprises the reaction of compound (9a):

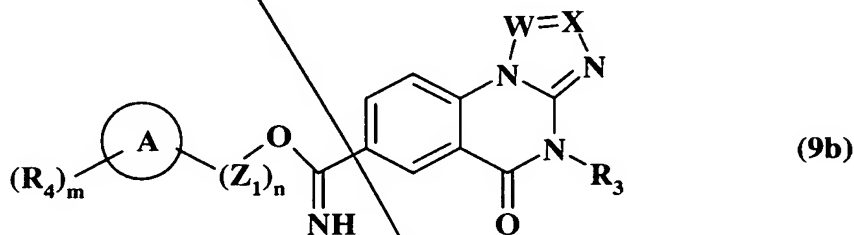


in which W, X, and R<sub>3</sub> are as defined in the compound of formula (I),  
with the compound of general formula (7h):



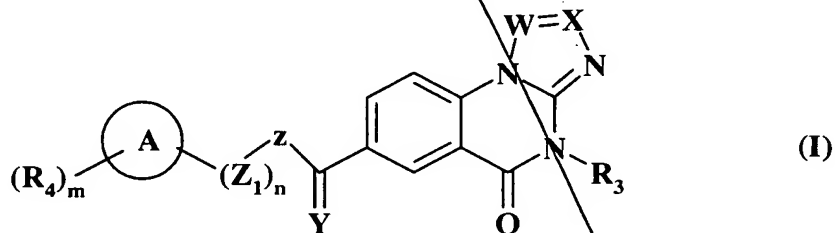
in which R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in the compound of formula (I),

to give the compound of general formula (9b), which is a particular case of the compounds of formula (I):

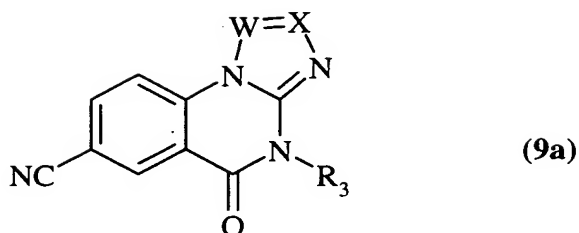


in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined hereinbefore.

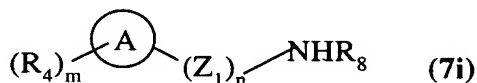
28 -. Process for manufacturing a compound of general formula (I),



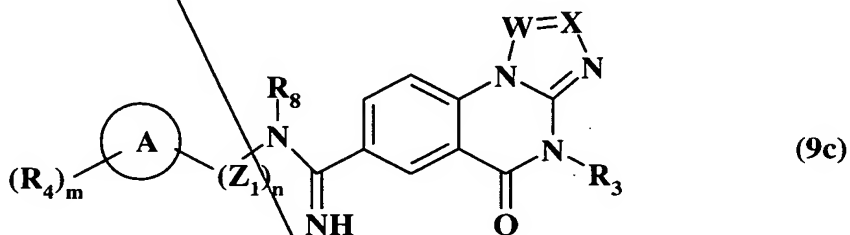
in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in claim 1, Z is -NR<sub>8</sub> and Y is NH,  
the said process being characterized in that it comprises the reaction of compound (9a):



in which W, X, and R<sub>3</sub> are as defined in the compound of formula (I),  
with the compound of general formula (7i):

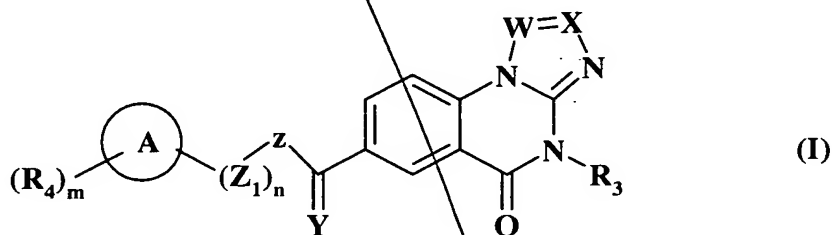


in which R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in the compound of formula (I),  
to give the compound of general formula (9c), which is a particular case of the compounds  
of formula (I):

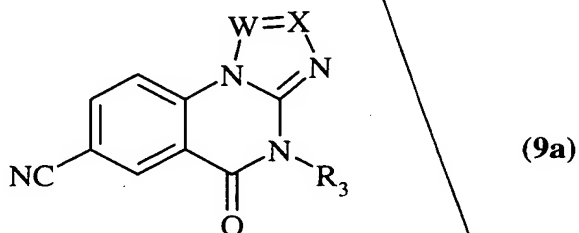


in which W, X, R<sub>3</sub>, R<sub>4</sub>, R<sub>8</sub>, n, m, Z<sub>1</sub> and A are as defined hereinbefore.

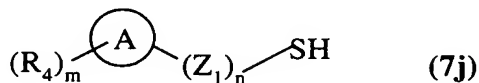
29 -. Process for manufacturing a compound of general formula (I),



in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in claim 1, Z is S and Y is NH, the  
said process being characterized in that it comprises the reaction of compound (9a):

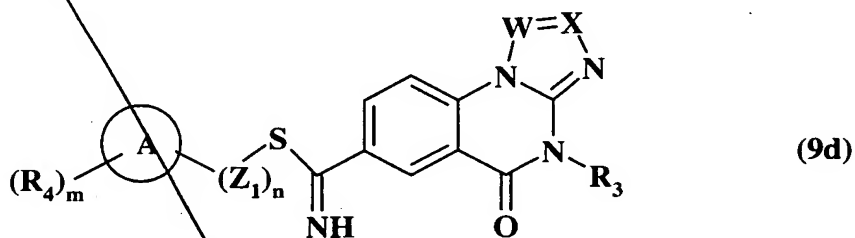


in which W, X, and R<sub>3</sub> are as defined in the compound of formula (I),  
with the compound of general formula (7j):



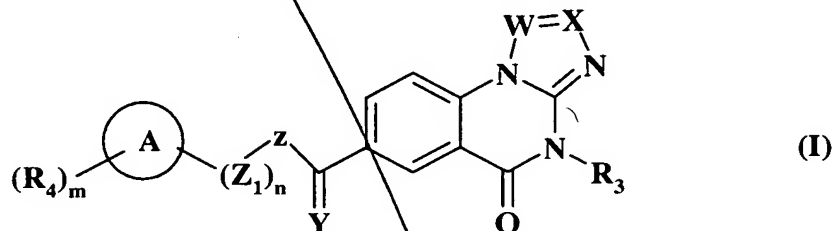
in which R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in the compound of formula (I),

to give the compound of general formula (9d) which is a particular case of the compounds of formula (I):

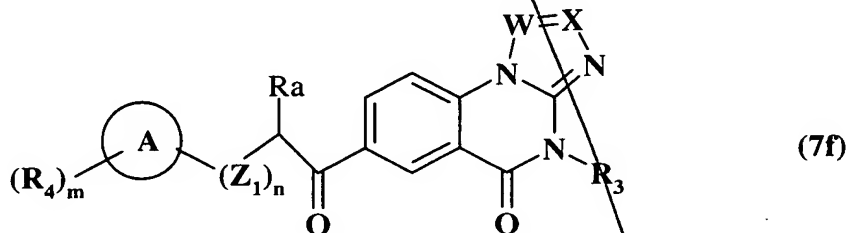


in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined hereinbefore.

30 - Process for manufacturing a compound of general formula (I),

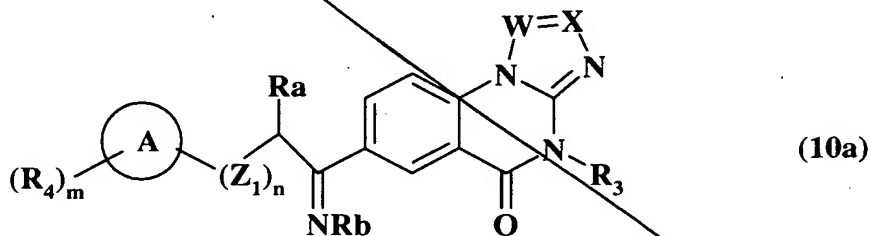


in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in claim 1, Z is -CHRa in which Ra represents a group selected from hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, aromatic heterocycle, non-aromatic heterocycle, and cycloalkyl, and Y is N-Rb in which Rb is a (C<sub>1</sub>-C<sub>6</sub>)alkyl, the said process being characterized in that it comprises the reaction of compound (7f):



in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub> and A are as defined in the compound of formula (I), and in which Ra is as defined hereinbefore,

with Rb-NH<sub>2</sub>, in which Rb represents a (C<sub>1</sub>-C<sub>6</sub>)alkyl group, in a presence of a dehydrating agent, to give the compound of general formula (10a), which is a particular case of the compounds of formula (I):



in which W, X, R<sub>3</sub>, R<sub>4</sub>, n, m, Z<sub>1</sub>, Ra, Rb and A are as defined hereinbefore.

31.- Pharmaceutical composition comprising a compound according to any one of Claims 1 to 18 and a pharmaceutically acceptable excipient.

32 -. Use of a compound according to any one of Claims 1 to 18, for the preparation of a medicinal product intended for treating a disease or complaint involving therapy by inhibition of type-13 matrix metalloprotease.

33 -. Use of a compound according to any one of Claims 1 to 18, for the preparation of a medicinal product intended for treating arthritis, rheumatoid arthritis, osteoarthritis, osteoporosis, periodontal diseases, inflammatory bowel disease, psoriasis, multiple sclerosis, cardiac insufficiency, atherosclerosis, asthma, chronic obstructive pulmonary diseases, age-related macular degeneration and cancer.

34 - Use according to Claim 33, characterized in that the disease is arthritis.

35 - Use according to Claim 33, characterized in that the disease is osteoarthritis.

36 -. Use according to Claim 33, characterized in that the disease is rheumatoid arthritis.

37 - A method for treating a disease or complaint involving a therapy by inhibition of MMP-13, the said method comprising the administration of an effective amount of a compound according to any one of Claims 1 to 18 to a patient.

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5 38- A method for treating a disease according to Claim 37 characterized in that the disease or the complaint are selected from arthritis, rheumatoid arthritis, osteoarthritis, osteoporosis, periodontal diseases, inflammatory bowel disease, psoriasis, multiple sclerosis, cardiac insufficiency, atherosclerosis, asthma, chronic obstructive pulmonary disease (COPD), age-related macular degeneration (ARMD) and cancers.

10 39- A method for treating a disease according to Claim 37 characterized in that the disease is arthritis.

40- A method for treating a disease according to Claim 37 characterized in that the disease is osteoarthritis.

41- A method for treating a disease according to Claim 37 characterized in that the disease is rheumatoid arthritis.

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